DOCUMENT RESUME

ED 155 570 CG 012 691

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TITLE A Positive Growth Model for Adult Development and Aging: The Model of Experience.
PUB DATE 23 Sep 77
NOTE 24p.; Paper presented at the Annual Meeting of the International Society for the Study of Behavioural Development (4th, Pavia, September 19-25, 1977)

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS Adjustment (to Environment); *Adult Development; *Age Differences; Changing Attitudes; *Experience; *Growth Patterns; *Individual Development; Maturation; Models; *Personal Growth

ABSTRACT

This paper proposes a model, with experience as the key concept, which focuses on the continuity of changes throughout adulthood. It assumes that as people move through time, they continually make experiences, the quantity, range and content of which may vary across individuals. A distinction is suggested between the process of "making experiences," which refers to a dynamic process in which experiences are continuously modified, and that of "having experiences," which refers to the more or less stable outcome of accumulated experience. Allowing for individual differences in the propensity to seek novel or familiar experiences, the model predicts not only quantitative changes in the developing person, but also qualitative transformations which interact with ontogenetic changes. In an endeavor to aid the introduction of a positive ideology concerning changes in late adulthood, the paper focuses on positive outcomes of accumulated experience, (such as sense of freedom or interest in spiritual concerns) which emerge from an interaction of developmental changes and the dynamics of making experiences in the course of one's life. (Author)

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A Positive Growth Model for Adult Development and Aging: The Model of Experience

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This paper is dedicated to Klaus F. Riegel, a great teacher of mine.

A Shortened Version of this Paper is Presented in the Symposium Models of Development, Aebli (Ed.) at the 4th Meeting of the International Society for the Study of Behavioural Development, Pavia, Italy, September 19-23, 1977.

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A POSITIVE GROWTH MODEL FOR ADULT DEVELOPMENT AND AGING: THE MODEL OF EXPERIENCE

Critique on the decline model of aging is becoming fashionable and an upsurge of environmental theories of aging which stress the modifiability of aging can be noticed (Baltes & Baltes, 1976). The implication of these 'optimistic' approaches to aging is basically that the frequently observed decline concurrent with aging is not inevitable but environmentally induced (see Bennett & Ahammer, 1977 for a review) and in part due to a stereotypic belief on the part of researchers that aging is a downhill process.

The present paper attempts to go a step further in the search for a model which conceptualizes adult development and aging as a process characterized by continuous growth rather than by stability (stagnation) and/or decline. The aim is, in line with some isolated yet exciting growth models of adult development (Kohlberg, 1973; Schaie, 1975) to aid in the introduction of a new 'ideology' (Riegel, 1973) about aging which should bias researchers in 'positive' directions previously unexplored. While multidirectionality of developmental aging changes (Baltes & Schaie, 1976; Baltes & Willis, 1977) is recognized, the present model is deliberately restricted to such changes which may indicate growth (rather than stability or decline) in order to give sufficient weight to a point of view which is relatively new to gerontological researchers.

The Model of Experience

Since development in the adult years does not seem so closely tied to biological changes as it is in childhood/ adolescence and the terminal stages of life, "adulthood is the nearest thing we have to a pure experiment-in-nature for assessing the change making power of experience alone..." (Flavell, 1970, p.250). Kohlberg (1973a, 1973b), inspired by philosophers and the new optimism among gerontologists, looked for adult stages in moral reasoning and indeed reports to have found some evidence for such where he had formerly argued for the impossibility of adult stages. His conversion is an interesting one since it illustrates clearly the influence of 'ideologies' on the interpretation of data. If there are new stages of adult thought, Kohlberg asks, what is the nature of adult experience leading to new stages in moral reasoning, for example? Kohlberg's answer -

similarly to Schaie's (1975) - lies in qualitatively new experiences of adulthood (such as being in positions of responsibility, making decisions with practical consequences for oneself and others) as compared to earlier periods of development (where the typical experience was one of acquisition of knowledge rather than of knowledge application).

The concept of experience is the key concept of the model to be proposed in this paper. Yet in contrast to Kohlberg's (1973a, 1973b) model, experience is viewed in more general terms as a dynamic continuous and discontinuous variable which undergoes constant modifications. Since experience clearly accumulates with age it appears to be a perfect antecedent variable accounting for developmental changes of a cumulative nature, that means in a growth function. In this sense, it clearly fulfills the requirement of a 'good' process-oriented explanatory analysis as postulated by Baltes and Willis (1977) which "has to incorporate a perspective of change not only with regard to behavior change to be explained but also with regard to the class of antecedent variables and their interlocking functional relationships" (p.). In addition, the fact that the outcome of a considerable amount of experience appears to consist of such positive qualities as knowledge (i.e., knowledge of regular event sequences which allows prognoses about the effects of certain actions and natural events, according to Hume), judgment (according to Aristotle, being familiar with sufficient examples and counter-examples that allows a judgment about statements, cases etc.), and insight (detecting the essence of things - knowing what is important and unimportant - and viewing things in their totality), gives further confidence in the usefulness of basing a growth model of adult development and aging on the concept of experience.

Definition and Defining Criteria of Experience

Experience is often equated with knowledge that accrues through the storage (memory) of what has been experienced or learned. In the course of making experiences, new experiences are integrated with past experiences whereby the latter are often restructured in the light of the new information. English and English (1958) define making of experiences as "passing through and adjusting to a particular set of circumstances" (p.194) whereby the actions involved must satisfy the following criteria in order to qualify for experiences.

Firstly, making an experience is an active process (as distinct from book learning, for example). In other words, experiences cannot be taught but must be made. The teaching of conclusions which are to be drawn from particular experiences (which a person has not experienced himself) is ineffective.

Secondly, making an experience is a voluntary or conscious process as distinct from habits or habituated responses. Upon numerous repetitions, the action which initially constituted an experience may eventually become a habit.

Thirdly, making experiences involves a great deal of cognitive activity. The process of integrating present experiences with the storage of past experiences, and of restructuring past experiences in the light of the new experience is a cognitive process. The choice of an appropriate and accurate response (action) in a given situation, based on conclusions drawn from earlier experiences which may include the learning of 'significant symbols' (Kimmel, 1973) or of 'rules' (Goodnow, 197) also involves reason.

Cognitive elements are further involved due to the limitations of human experiences as always being concrete from which the general can only be abstracted (Hegel, Schopenhauer) - where the process of subsuming concrete experiences under abstract concepts is seen as essential if there is to be any storage of that experience (Hegel) - and particular, that is, representing only single instances in a whole universe of instances (from which upon repetition, however, generalizations can be derived) (Russell, 1921).

The content of experience can be as varied and manifold as the content of consciousness thus no systematization will be attempted. Yet a few distinctions may seem helpful for the development of a life-span model based on the concept of experience. Thus, experiences can be personalized (individualized or unique to the individual), generation-specific (restricted to certain generations due to unique historical events), or universal (across historical times and cultures; in this sense, Jung (19) speaks of experiences of humanity, and analyses by Kohlberg (1973a, 1973b), Schaie (1975), and Schopenhauer (1851) imply the repetition of certain experiences in each ontogenetic life-span). Furthermore, the distinction between outer experiences (experiences with external objects and events) and inner experiences (experience of one's own inner activities and states, knowledge of one's character, one's selfhood) may be relevant for a life-span model.

Having Experience versus Making Experiences

Conceptually it seems useful, albeit arbitrary, to distinguish between making experiences which refers to a dynamic more or less invariant process and having experience which refers to the store of knowledge and expertise, a momentarily stable outcome resulting from the process of making experiences[1]. This distinction is analoguous to one made by Riegel (1975) in regard to development:

> "Development proceeds through dialectic interactions between psychic activities and their inner biological and outer socio-cultural foundations...if we look at the objectified (products or outcomes), development represents...a sequence of temporarily stable schemata; if we look at the activities, development represents a constant flux of transformations" (p.23).

In this sense, if we look at the activity of making experiences (an active, voluntary, cognitive process) we consider a change model which focuses on the "constant flux of transformations" whereby the nature of the transformations and the processes/mechanisms involved may vary somewhat across the life-span. If we look at the products, our model will yield a catalogue of temporarily stable characteristics, the various outcomes of extended and accumulated experience (akin to the far too familiar catalogues of negative characteristics that were typically yielded from decline models of aging). Our model is truly dialectic (Riegel, 197) in the sense that the 'temporarily stable' products (e.g., knowledge) inherently lead to new transformations as is implied by the nature of knowledge, for example, which can never comprehend the universality of instances but only particular ones (Russell, 1921) and thus needs to be continuously verified or modified. The 83 year old philosopher Karl Jaspers has similarly described wisdom: "Wisdom is never fully attainable. We will never know it. But there are ways of getting at it" (Harris, 1970).

The psychological benefits for the person continuously engaged in modifying his knowledge have been aptly described by C.G. Jung:

> "The serious problems of life, however, are never fully solved... The meaning and the design of a problem seem not to lie in its solution, but in our working at it incessantly. This alone preserves us from stultification and petrifaction" (1933, p.103).

Thus, the dynamic nature of experience both in the process of making experiences and in the process of transforming (restructuring) knowledge in the light of new experiences represents an essential feature of our model. If in the course of the paper more emphasis is put on the outcome of extended and accumulated experience than on

process this is due to the fact that the outcome is easier to describe than the process as such. One should bear in mind that this is but the first sketch of the model of experience and therefore likely to be deficient in many respects, the overemphasis on the stable aspects being but one.

Adult Development and Aging in Light of the Model of Experience

The present model is intricately tied to the time dimension or the flow of time. The concept of chronological age is being avoided on purpose due to its inherent problems as organizing variable that are discussed at length elsewhere (Baltes & Willis, 1977). Basically, we make the assumption that as people move through time they inevitably make experiences the quantity, range, and content of which may vary across individuals. Time is assumed to affect the process of making experiences differently than the outcome of having experience.

The mechanisms involved in making experiences, verification (that is, confirmation of one's past experience including beliefs and attitudes mostly through the happening of something expected) which strengthens one's store of experience and typically does not lead to changes, and falsification (that is, the refutation of part of one's experience, beliefs, attitudes through the happening of something unexpected or the input of new information) which leads to modifications and restructuring of one's past experience, are assumed to remain relatively unaffected by time. In other words, verification and falsification are assumed to constitute invariant principles accounting for the process of making experiences whereas the nature of the cognitive processes involved in integrating new information into one's structure of thought, and the propensity for verification or falsification respectively may vary across age. In addition, the effects of repeated verification and falsification on the experiencing person are likely to change as a function of time. One need to consider only the fact that over an extended time period repetitions of experiences are becoming more numerous (and novel experiences are likely to diminish) which will influence the person beyond mere confirmation of his views. These effects of verification and falsification over an extended time period will be examined in the following section.

Since the present model is deliberately restricted to positive changes or gain (as is implied in the concept "gaining experience"), the effect of time on having experience is obviously one of accumulation. Growth of experience can be quantitative ("numerical addition of new kinds of facts,or of new single facts of old kinds.... that involves no alteration in the old beliefs", James, 1955, p.51) or qualitative (where the stock of old experiences is gradually modified to incorporate new ones) which may lead to qualitatively new characteristics or attributes of the experiencing person.

The present model is clearly interactional or dialectic in the sense that the process of making experiences and drawing conclusions from these cannot be separated from other developmental changes but interacts with inner biological and psychological changes, and outer sociological and historical changes (see Riegel, 1973 for this classification of developmental changes).Whereas the mechanisms involved in making experiences are assumed to remain invariant, as discussed above, the content of experiences is likely to be in part determined by these developmental changes. As implied by the Kohlberg (1973a, 1973b) and Schaie (1975) analyses mentioned earlier, age-graded role requirements introduce qualitatively new experiences at different stages in life. Alternatively, biological and psychological changes through a process of self awareness may become the subject of experiences themselves.

In addition, the conclusions drawn from experiences (outcome) may interact with the developmental status of a person on these various dimensions of change. The same experience will have a markedly different effect on an aging person than on a youth partly due to a difference in their past store of experience but also to a difference in functional age with respect to biological, psychological and social parameters. The same, of course, will be true for aging people who differ in their functional age. The last section of the paper will be concerned, then, with examining the effects of biological changes (declining drives), psychological changes (changing time perspective, increased interiority etc.), social changes (changing roles from acquisition of knowledge to application and taking on of responsibility to abdication of the latter) and historical changes (effects of specific historical events) on the qualitative nature of experience, and on the resulting 'positive' characteristics of the experiencing person.

Last but not least, in the true dialectic sense the making of experiences not only is influenced by inner and outer changes of the individual but in turn both affects the person (psychologically and possibly biologically) and the environment (socially and possibly historically).

Although in general agreement with the recent postulate that a "general gerontology must be replaced by a differential gerontology" (Lehr, 1977), that is, that a good psychogerontological theory should be able to explain individual differences rather than explaining them away as error variance, the nature of individual differences in the framework of the present model cannot be explored due to its preliminary nature. However, the model does seem in principle to be able to incorporate multidirectionality (the fact that some people grow while others stagnate or regress, and the fact that some domains of experience grow while others petrify) yet no attempt has been made at this stage to examine the determinants of differential growth (across people and across domains) and of differntial speed in growth.

Making Experiences Over Prolonged Time Periods

How do we make Experiences? - Two Abstract Principles

Basically, making experiences from which conclusions can be drawn (predictions made, future action plans derived) or from which knowledge is derived is a gradual process akin to learning processes. As is implied in the concept "learning from experience", traditional learning theories would seem to provide good explanatory principles (e.g., reinforcement and punishment) accounting for the processes through which knowledge is achieved. Alternative, yet equally valid, explanatory principles could be derived from cognitive-developmental theory (Piaget, Kohlberg) in which concepts of incongruity, imbalance, and disequilibrium are seen as sources for growth.

Two abstract principles, better known among philosophers and epistemologists than among psychologists, which can be identified in both learning and cognitive-developmental theory will be dealt with to discuss the effects of making experiences on the aging person: verification referring to a confirmation of one's existing experience, and falsification referring to a refutation of some of the existing experience. Both, verification and falsification, imply a continuous adaptation of experience "in the hope of approaching nearer to the truth" (Popper, 1972, p.71).

If one criterion of experience (and of knowledge won through experience) is accuracy in relation to facts (or truth), verification is one criterion which increases the probability of truth (Russell, 1921). According to Russell, the plainest case of verification consists in the happening of something expected. The experience of verification in this sense is exceedingly familiar, that is, everytime that accustomed activities have results that are not surprising (such as eating, walking, talking, all our daily pursuits). "If the occurrence, when it comes, gives us the feeling of expectedness, and if the expectation, beforehand, enabled us to act in a way which proves appropriate to the occurrence...(there is)a maximum of verification" (Russell, 1921, p.330).

In contrast to Bertrand Russell, the philosopher of science Karl Popper (1972) argues that falsifications are considerably more important in 'approaching nearer to the truth' than are verifications since it "is incorrect and grossly misleading to think that we can interpret the 'verification' of a prediction as 'verifying' the explicans or

or even part of it"(p.353) since verifications do not point to the sole determinants of an event (there may be overdetermination) whereas falsification points to the one which is not a determinant. Popper sees the advantage of falsification in the fact that "every time we succeed in falsifying a theory, we make a new important discovery. For these falsifications are most important. They teach us the unexpected..."(p.197).

Hegel similarly sees falsification as essential in correcting knowledge: "We correct knowledge by falsifying it at any randomly present external object" (cited in Krings,). Schopenhauer (1851), analyzing the value of experience in the course of human life, sees its main value as falsifying the concepts (and illusions) formed in youth. And the sociologist Schelsky (1977a) comes to the same conclusion in defining experience as disappointment, as something which has to be suffered through where disappointment could be meant to read 'falsification of expected ideals, concepts, and illusions'.

In short, there seems to exist considerable agreement among philosophers and scientists of various orientations that falsification is the more important principle of the two in gaining knowledge or certainly in producing change whereas verification may be the commoner one in the course of human life. The effects of both repeated verification and falsification over prolonged time periods will now be explored.

Time and Verification

As age increases, verification of expected events and outcomes of actions are likely to become increasingly frequent. In other words, situations, events, and actions are likely to be repeated innumerously and in many instances tend to happen in expected ways. What are some effects of such repetitions? Some guidelines are taken from literary and philosophical works, a few from the psychological literature.

First of all, frequent repetition and verification leads to overlearning, the required actions are performed with less effort and more ease which at one extreme may lead to inflexibility should alternative courses of action be required. Frequent practice of certain behaviour repertoires (e.g., social, technical) leads to competence, that is to a repertoire of (social/technical) skills. Neugarten (1967),

furthermore, reports a conscious awareness of one's competence ("I know what I can do best") with a concurrent sense of power (because the middle aged is more experienced and competent than the younger counterpart) and a source of pride in a group of professionally successful middle aged. Sense of competence has not been investigated in the aging to my knowledge, yet the dramatist Max Frisch (1972) sees in the same competence that is a source of pride for the middle aged a source of boredom for the aging since competence (mastery) appears to become a substitute for imagination. To quote:

> "...(the old artist)...knows better and faster what is successful; in this sense, he is more efficient; but he feels less free - there was more hope in failure...his imagination diminishes - he can only imagine what he masters - that is what is called his 'Altersstil'" (p.316, own translation).

Whether this rather cynical view of the subjective meaninglessness of competence in the aging is more common among artists and creative professionals who value highly imagination than it is among the average aging individual awaits verification (or falsification?).

The chord of boredom, however, is struck again in the context of frequent repetitions of events. There appears to be a diminishing curiosity in the aging which may be due to the knowledge, based on experience, that many events have been there before and tend to replicate earlier ones and that after a long life little tends to happen that is novel or unexpected. Frisch (1972) again seems to know that verification of one's experiences tends to be boring: The aging "knows which wishes cannot be satisfied. He calls that his experience. What bores him: the confirmation of his experience" (p.117).

The Hungarian novelist Tibor Déry (197)in an autobiographical novel on his own aging draws a different conclusion from the repeated experience of which wishes are not attainable: he sees the great strength of the old in renunciation, akin to Erikson's 'gift of responsible renunciation' which he sees as an attribute of wisdom among the aged (in Clayton, 197). Maybe research on the adaptation level and the nature of curiosity (Berlyne, 19) can provide a clue as to the relationship between repetitions of events (familiarity) and boredom or contentment.

The notion of repetition of situations (and verification of one's expectations) lead Schopenhauer (1851)[2] in his Aphorismen zur Lebensweisheit to a number of interesting hypotheses. First of all, he

assumes - probably based on his own experience - that "through frequent and finally innumerable repetition much of what initially appeared important gradually becomes unimportant...the longer we live the less events appear important and meaningful enough to us, to be remembered" (p.292, own translation, italic added) which leads him to a novel hypothesis with regard to the declining short-term memory in the aging. As is being recognized recently by gerontological researchers of memory processes, only what is meaningfulcan be remembered (Botwinick, 1973) and much of what is meaningful to the young is not so for the aged.Since less events are important or meaningful to the aging (due to innumerable repetitions), there is less worthy of remembering and thus few events of short-term significance to be stored into memory. Long-term memory, on the other hand, remains intact since the events in youth - due to their novelty - appeared important and thus were rehearsed sufficiently often to be well remembered, according to Schopenhauer.

Asecond not less interesting hypothesis with respect to time perception is derived from the same premise. In childhood and youth, time appears much longer and to pass slower due to the novelty which makes everything appear important and worthy of rumination whereas "the older one becomes the less one lives with consciousness. Things rush by without making an impression like the work of art one has seen a thousand times: one does what one has to do and afterwards does not know if one has done it. By life becoming less conscious, the course of time becomes more rushed" (Schopenhauer, 1851, p.297, own translation).

Falsification and Time

While verification of one's beliefs and knowledge is a common experience in daily life, so is falsification. Yet people may respond differently to information that is incongruent with their beliefs - they may either try to modify their stock of ideas to incorporate some of the new information or they may choose to ignore or distort dissonant information in such a way that the existing belief system remains unchallenged. The key to individual differences in responding to experiences over the life span may indeed be found in different propensities of people to either seek confirmation for their views or to accept falsifications in the sense of questioning their beliefs and knowledge or to even seek falsifications as characterized by a thirst for knowledge.

Seeking verifications rather than falsifications may be the commoner tendency among people due to their fundamentally conservative nature as suggested 70 years ago by William James (1907) - which may of course be differently today - and may be based on the world view that knowledge is finite and that we can reach certainty about what is true and false. The inclination to seek falsifications, or at least to admit some modification of past knowledge in light of new information, seems to be based on a contrary world view namely "that one cannot know for sure that we have got nearer to the truth... (that) we can never be sure that we have actually reached truth" (Popper, 1974, p.88). Maybe only persons accepting the 'fallibilism' criterion (Popper, 1974), that is, that all men are fallible and should always be critical of their ideas searching for mistakes in them, are the ones to show positive signs of growth as a function of a life full of experiences. These may indeed be the wise old men (and women) whose life is characterized by a continuous search for knowledge (as Solon is quoted of saying "I am growing old and I am learning more"), and an insatiable thirst for novelty (as the late 92 year old philosopher Ernst Bloch has been described to the end of his life).

But what are some of the more common effects of frequent falsifications of one's ideas and actions over the course of human life? With respect to the cognitive domain perhaps the most important consequence of having one's ideas refuted is a cognitive <u>flexibility</u> which is necessitated by a continuous adaptation of one's thought structures to novel/dissonant information. Riegel (1973) in the Hegelian dialectic framework sees the whole process of thinking as one of transforming contradictory experience into momentarily stable structures. The adult stage of thought which accepts contradictions not only as inevitable but as essential properties of thought and life itself (Riegel, 1973) can only be seen as a consequence of repeated and innumerable refutations of one's thoughts and experiences.

That falsification of experience, as motor for growth, should <u>not</u> be restricted to the <u>logical</u> falsification of ideas but should comprise falsifications of an <u>affective</u> nature as well has been shown convincingly

by Chandler (1975) in an anlysis of Piaget's theory of cognitive development which assigns the 'highest' or most mature stage of thought to abstract logical thinking. But what are some emotional consequences of accepting abstract relativistic thought beyond the solution of abstract logical problems? Chandler asks. The adolescent faced with the principle of relativism - which implies that there are no objective criteria of truth but only idiosyncratic and individualized viewpoints - is likely to dispair in the face of this 'epistemological loneliness', of this growing recognition to be alone with his subjective view of the world and the sense of estrangement from others. The adolescent's emotional discomfort and uneasiness may then result in the 'falsification' of the logical principle as generally valid and he may resort to a variety of regressive solutions (e.g., search for an ideology with a communality of points of view), or, he may arrive at a yet more mature "complementary system of thought which stresses the more concrete, personalized features of experience...and of affectively meaningful events...which does not sacrifice the particular to the general, but preserves both in a common embrace" (Chandler, 1975, p.178/179).

The importance of this analysis lies in the - by research psychologists too often ignored - recognition of the intricate interaction between affective and cognitive experiences. Thus, while emotional experiences may falsify cognitive principles, and vice versa, more importantly, dialectic solutions may be found combining both.

In the following analyses no differentiation is made between cognitive and affective experiences but both are viewed in a 'common embrace'. Schopenhauer (1851) sees the value of experience in the falsification of illusions: the "first thing that experience finds to accomplish: to free us from the illusions and false concepts which have been formed in youth" (p.288, own translation). For Schopenhauer, the youth in the firm belief that there is happiness to be found in life learns through continuous disappointments (i.e., falsifications) that this is an illusion. His pessimism then leads him to conclude that the main characteristic of very old age is <u>being disappointed</u>: the illusions which used to be the driving force of life have vanished, one realizes that most things one has really wanted were not worth striving for, and finally one recognizes the vanity of all existence. The latter in turn gives the aging that particular <u>peacefulness</u> which makes him smile at the futile strivings of the world.

Schelsky (1977a) similarly defines experience as disappointment. According to his analysis, one draws conclusions from experiences only when these involve disappointment and suffering which in turn aid in the formulation of a'life plan' (Lebensplan). Conclusions from positive experiences (verifications) are less distinctly drawn, if they are formulated at all. Since these sufferings are tied to specific historical events, the analysis of the relationship between particular events (experiences) and particular life plans will have to occur separately for each generation, according to Schelsky.

According to the great German poet Goethe, a long life filled with apparently random refutations of one's predictions, expectations, and wishes is likely to lead to mysticism because "much seems to depend on accident: the reasonable fails, the unreasonable succeeds, happiness and unhappiness are on a par..." (Goethe, 1943, p.67).

Falsification and Range of Experiences

As discussed earlier, falsification if it is accepted as such implies a search for alternative explanations or solutions. In this sense, falsification - in contrast to verification - will lead to a conscious effort of expanding the range or variety of experiences. This must be distinguished from the widening range of experiences that accrue in a human life time as a sheer function of time which may or may not be used profitably by the experiencing individual. Thus, individual differences are again at the heart of the distinction; time alone does "not necessarily imply that an older person would have greater insight into himself...for many of these experiences may be carried on in the present by habituated responses. But the older person may clearly have the potential to benefit from the greater range of experiences of himself in a larger number of situations than a younger person" (Kimmel, 1974, p.58).

This conscious effort of expanding the range of experiences seems accompanied by a conscious perception in middle-age of one's improvement in the exercise of judgment and in grasping realities (Neugarten, 1967). Judgment should indeed improve if constructive use is made of a wide range of experiences (providing sufficient cases of verification and falsification over a long time span). In addition, there appears a striking characteristic among the middle-aged to reflect on the modification and transformation of their experience, "that is, the conscious processing of new information in the light of what one has already learned" (Neugarten, 1967, p.98).

Another beneficial effect of having had a wide range of experiences in the course of a long life is best expressed by a broadcast of a 91-year old on his birthday.

> "Do not be sorry for a man in his nineties as I am. He has three advantages. He has seen no end of forebodings of disaster come to nothing. He knows that the many changes that have taken place in his lifetime have been almost wholly for the better. He has undergone what I call the final discipline. By that I mean that he has usually come through what he may take to be the worst and the best that can happen to him" (cited in Irvine, Bagnall & Smith)

and has emerged with the <u>confidence</u> that he can survive them all.

Having Experience

Having experience is typically equated with accumulated knowledge. It would be misleading to assume that the accumulation of knowledge is merely of a <u>quantitative</u> nature where new bits of information are added onto past knowledge. As has been discussed before, having experience - in line with the view that knowledge is infinite and that we can never have certainty about being close to the truth - implies a continuous adaptation of the existing store of knowledge to new information, a continuous restructuring of past knowledge in light of new experiences which eventually lead to <u>qualitative</u> transformations in the nature of knowledge.

In this sense, Schopenhauer (1851) notes the value of a long life (rich experience) for the proper understanding of things: "What one thinks to know in youth one really knows only in old age...one really knows much more...and has a thought-through and well integrated knowledge" (p.301, own translation). Here probably lies the key to grasping some of the qualitative transformations of knowledge: through viewing things over and over again and from all sides and in new combinations one comes to understand them in the <u>right context</u>, gains a <u>sense of proportion</u>, and understands the <u>full meaning</u>.

Since, as mentioned earlier, making experiences cannot be separated from inner biological and psychological and outer social and historical changes, a more fruitful approach to the changing nature of knowledge in the adult years seems to lie in an examination of these various interactions. As a comprehensive analysis would encompass the totality of gerontological and adult development research only a few select examples will be given.

Biological Changes

With respect to biological changes there is the view, for example, that drives including the sex drive decline. While the latter is being rejected vehemently by followers of environmental theories of aging who, blaming inhibiting social conditions, bring evidence of continued sexual capacity in both men and women up to the end of life (e.g., Masters & Johnson, 1966), the present model takes a different approach finding its inspiration again from Schopenhauer. Here, diminishing drives - whether they decline universally or only for some individuals - are viewed as source of new strength. Plato, for example, (cited in Schopenhauer) views old age as fortunate insofar that it is rid of the constantly disquieting sexual drive.

Why should old age be lamentable because some pleasures are denied to it? Schopenhauer asks. "Since every pleasure only implies the existence of a need: that with the former the latter vanishes is as little worthy of lamentation as is the fact that after eating dinner one cannot eat anymore or after a good night's sleep one must stay awake" (Schopenhauer, 1851, p.304/305). Being freed of that 'chain' - the sex drive - is reason enough for serenity characterizing the aging. Schopenhauer goes even so far as to applaud the decline in drives which results in new freedom for the aging person.

Max Frisch (1972) similarly sees a virtue in the diminution of drives: the aging becomes more peaceful, that is, less driven and possibly freer for the knowledge of the 'essential' things.

Psychological Changes

The changing time perspective in adulthood, from viewing the future as infinite to a conscious recognition of the finitude of one's life and the increasing nearness to death, is probably one of the main determinants of the frequently described philosophical or spiritual/metaphysical concerns of aging individuals. As the child is described by Piaget as a philosopher who constructs reality, the aging may be viewed as philosopher. who makessense of reality (see Kohlberg, 1973b).

In this sense, Erikson (195) views the main task in old age to achieve ego integrity which implies, among others, to envision life in its entirety, to perceive a world order and spiritual sense.

Kohlberg's (1973a, 1973b) adult, at first dispairing at the apparent meaninglessness of life in the face of death, moves on to a seventh stage of moral/ethical reasoning which asks the fundamental question of the meaning of one's life. Schaie (1975) more prosaically ascribes this 'cosmic' orientation to a select few only ('the wise old men') while he assumes that the majority of older individuals restrict their search for meaning to the immediate life situation.

Probably related both to declining energy (including ego energy; Rosen & Neugarten, 1964) and to the realization of the finitude of one's life, there is a well documented shift from middle adulthood onwards from outer to inner experiences (Ryff & Baltes, 1976; see Kimmel, 1974 for a review). In other words, there is a decreased concern with external social and environmental demands and a concurrent focus upon internal processes. Jung (1933) perceives in this shift a key task for the aging:

> "Aging people should know that their lives are not mounting and unfolding, but that an inexorable inner process forces the contraction of life. For a young person it is almost a sin - and certainly a danger - to be too much occupied with himself; but for the aging person it is a duty and a necessity to give serious attention to himself...Instead of doing likewise, many old people prefer to be hypochondriacs, niggards, doctrinaires, applauders of the past or eternal adolescents - all lamentable substitutes for the illumination of the self, but inevitable consequences of the delusion that the second half of life must be governed by the principles of the first" (p.108/109, italics added).

In a surprising convergence of ideas, the sociologist Schelsky (1977b) similarly sees the main task of his generation of aging people "who have become clever and successful through experience" ("des durch Erfahrung klug und erfolgreich gewordenen Alters") to consciously turn away from the external world and focus on the experience with themselves. This shift from outer experience (in Schelsky's terminology from active professional life, decision making and positions of power and influence) to a preoccupation with oneself (with one's life- and character-identity) has two reasons: (1) in contrast to the youth who is searching for identity and whose main need consists in finding secure guidelines for his actions ('verhaltenssicherheit'), the aging person through accumulated experience has found the height of his identity ('Identitatshohe'), has found these guidelines, and his main need consists in maintaining this 'acquired character'. (2) The second reason seems less voluntary and is related to the process of passing on one's responsibility and power to the upcoming generation where the aging has to consciously

renounce the claim that one's life work be continued.

One implication that emerges from the shifting focus from concerns with the outer world to experiences with oneself appears to be a newly won freedom, be it freedom from social constraints and pressures (Goodnow, Note 1), freedom to be more eccentric and preoccupied with oneself ("Now life owes me a living", Audouard, Note 2), or freedom to decide what matters, what is important and what is unimportant (Schopenhauer, 1851). In this freedom which appears to make the aging fearless, Frisch (1972) sees one advantage of being old:

> "...since consideration does not pay off anymore it does not require anger...for the aged to say how things are...sometimes the others know themselves how things are. The aged is therefore not a seer but relaxed-fearless. What the antique seers had to say...also was rarely more than the obvious but what the others could not afford to see - out of consideration for themselves and to their own damage" (p.418, own translation).

Social Changes

Similar to inner biological and psychological changes, changes in the social environment of a person through changing role requirements over the life span, for example, are likely to lead to novel experiences. Kohlberg (1973a), in his search for the nature of adult experience, sees in the taking on of responsibility for others, in forming lasting commitments, and making decisions with practical consequences for others the key to adult experience. In other words, whereas the prime experience of youth - in prolonged periods of education - is that of knowledge acquisition, adults, either in professional or conjugal roles, are faced with the application of the principles that were hitherto tested in hypothetical situations.

Schaie (1975) draws a similar distinction between the acquisitive and achieving stages of childhood and youth on the one hand, and the responsible and executive stages of early and middle adulthood on the other. The latter are characterized by 'goal-directed formal operations' which aid in the solution of real life problems. In a surprising parallelism to both Kohlberg's and Schaie's formulations, Erikson (1950) - his theory probably providing the inspiration for the former - sees the main task for young adulthood in the forming of intimate relationships (akin to Kohlberg's lasting commitments) while middle adulthood's main concern is generativity, that is, the need to establish and guide the next generation, and to make an impact on society through productivity and creativity. The theories differ, however, in the importance they assign to these qualititatively different tasks: Kohlberg views them as

source for new stages of moral reasoning, Schaie sees in them the driving force for new cognitive and problem solving strategies unique to adulthood, and Erikson conceives them as nuclear conflicts or crises for the development of the ego.

In contrast to these psychological theories, the sociologist Schelsky (1977b) notices an even greater discontinuity between the experiences typical for adolescents and adults. In his analysis, the youth being 'experienced' in the protected environments of family, school, and in friendships and love affairs moves into the vast network of a complex modern society "for which past experiences have not prepared him". The negative solution to this transition consists in the uncritical adoption of ideologies (political or religious) - similarly to Chandler's (1975) adolescent who cannot cope with the acceptance of abstract relativistic thought - whereas the positive solution would be one of "applying one's acquired knowledge and principles through work and experience throughout adulthood" (similar to Kohlberg's and Schaie's adult).

While the experience of adulthood then is basically one of responsibility, commitments, and executive processes, aging is characterized by a reduction of environmentally programmed role requirements (be it through retirement, relinquishing of responsibility for one's children and family, or through widowhood and death of close friends). The experience of death probably interacts with the earlier described interiority and changing time perspective of the aging which contributes to their concern with metaphysical/ spiritual issues which has been discussed at length before.

With respect to the effects of retirement, rather than deploring its restrictive features, an interesting 'positive' hypothesis is suggested by some unpublished work by Martin (Note 3). Finding that between two and eight years after retirement imaginative activity increases among an educated group of personell, he concludes that

> "...when once freed from the prescriptions and proscriptions of the organizational life, and having the fundamental necessities of sufficient money, verbal ability and training, they are able to achieve a level of spontaneous thinking which they have not enjoyed since their early fifties (if then)...a much freer flow of ideas...There is a new freedom from concern about inter-personal relations in general and a large swing toward individualistic responses...it is possible that some creative jobs in industry...could benefit from the more uninhibited approach of men who had experienced a year or two of retirement" (p.41/42, italics added).

It is notable that freedom, this time freedom from concerns which had been imposed through professional obligations, emerges again as dominant theme characterizing the experience of the aging. Encourageingly enough, this research supports some of our earlier suppositions that the aging individual - due to his increased interiority - experiences freedom from interpersonal relations and social constraints (see p.18).

Whereas retirement appears to be the key experience for men bringing about this new feeling of freedom, middle age seems to do the same for women. Neugarten (1967), in her earlier mentioned study, reports that most women felt "that the most conspicuous characteristic of middle age is the sense of increased freedom" (p.96), which may be due to increased time and energy and to a positive change in the self-concept, but is often concomitant with employing one's latent talents and capacities.

Historical Changes

The impact of historical changes on the nature of adult experience can be conceptualized in two ways whereby the following analysis borrows heavily from Schelsky's (1977a, 1977b) work. Firstly, if there is continuous social change as there appears to be at present, there is the task for the changing individual - in addition to adapting to his inner biological and psychological changes and to changing role requirements - to continuously adapt to the changing social world. Therein lies the inherent danger particularly for older adults, according to Schelsky (1977b): older adults having brought about social change themselves through work and experience may tend to want to 'stop time' and to view that which they have helped to come about as unchangeable and permanent. The inability to either relinquish their responsibility or power to the young or to embrace novel ideas put forth by upcoming generations will lead to resignation, ressentment, or disgust about everything new (Schelsky, 1977b).

Secondly, "the experiencing of an event in history may frequently maintain its motivating power through the lifetime of the individual... The explicit internalization of such major societal changes (as mechanization of industrial production, giant extension of the educational system) has never been adequately studied in gerontological research" (Lawton & Nahemow, 1973, p.624). Schelsky (1977a) provides such an analysis of his generation of Germans (born 1900-1920) which may serve

as an exampledemonstrating the necessity to include the'internalization of historical events' in the study of life span changes. Schelsky and his generation have found their illusions and expectations of youth to be 'falsified' by the experience of war (of death, misery, and cruelty) and of a totalitarian regime. There followed a period of reflection (1945-48) due to forced inactivity (which was enforced by the coalition powers) which led to the maturing of'life-plans', that is, decisions and guidelines for one's life and work. One such decision was to conduct one's life according to the 'principle of experience' ('Prinzip Erfahrung') which, in a negative sense, implies the rejection of any ideology. In a positive sense, it refers to the reduction of one's social reality to intimate groups (family, friends) and to the management of one's life through one's own activity, without guardianship. From this last decision, the values of privacy (assumed to provide personal freedom) and dedication to work ('finally being able to work for oneself') were derived. Schelsky sees the young generation, having gone through very different experiences, as reacting against the life plans and solutions of the war generation and choosing to be guided by the 'principle of hope' ('Prinzip Hoffnung') which consists of a basically religious or ideological orientation to life, fundamentally opposed to the 'principle of experience'. Whether in the latter, Schelsky is not confusing specific historical events with a particular life span stage - reminiscent of Chandler's (1975) adolescent, for example - is debatable.

It will be interesting to see what life-plans the present generation of young (born in the 60's) will derive from their unique experience of being superfluous, not needed which already now gives them the label 'the useless generation'. Will they be better able to cope with increased leisure time and forced retirement, the experiences of uselessness that were hitherto reserved for the aged?

Conclusions

Here stands the skeleton of a new model of adult development and aging awaiting falsification. Because if there is no model there is no falsification and hence no new discovery - so, please, bring in your criticism.

There appears to be general agreement that people resist change, that they are "immensely conservative, not to say inert" (Jung, 1940), and that, if they change, they do so"with a minimum of disturbance" of the old stock of experience (James, 1907). In this context, the search for a growth model in adulthood may seem rather futile, and Clayton's (1976) question 'Where have all the wise men gone?' rather appropriate.

Yet, the present paper is based on different premises. Firstly, within the model of experience, everyone is viewed as continuously making experiences in his life time, however he may respond to and evaluate these, and whether these are primarily repetitions of 'old' (familiar) or whether these consist to a great extent of novel experiences. The process of'making experiences'is viewed as a dynamic process in which past experiences are continuously modified resulting on the one hand in the outcome of 'having (accumulated) experience' (e.g., knowledge which in itself implies continuous adaptation), and on the other hand in qualitative transformations of the changing personality (e.g., competence, sense of freedom to mention but few). Thus, despite a general tendency among people to seek familiar environments (Ahammer, 1973) and experiences, the present model focuses on the 'constant flux of transformations' which occur as a function of making experiences over time.

Secondly, the fact that the 'catalogue of positive qualities' characterizing the aging which emerged in the present analysis, has not been 'discovered' in earlier research can be attributed to the dominant ideology held by laymen and researchers alike that nothing of value can accrue in old age, and that these qualities (of spiritual concerns, personal integrity, sense of proportion) are assigned an inferior position as compared to the qualities of competence, skill, and power characterizing the middle aged (see Ahammer, Note 3). It was the purpose of the present paper to contribute to the introduction of a 'positive' ideology concerning life span changes into old adulthood, and to propose a model which focuses on the continuity of changes throughout adulthood.

The rather depressing question 'Wher have all the wise men gone?' should be more profitably replaced by a question into the determinants (social, biological and psychological) of positive growth (akin to Thomaes(1976) analysis of patterns of 'successful aging'). This will be the next step.